

## REMARKS

### Restriction Requirement

Applicants affirm the election to prosecute the invention of Group II, claims 22-34, drawn to apparatus and method for making a smoking article. Claims 1-21 were withdrawn by the Examiner as being directed to the non-elected invention of Group I, drawn to a smoking article and a smoking article wrapper. Applicants therefore cancel claims 1-21 without prejudice to filing a divisional application containing the same claims.

### Amendments

As a result of the amendments, cancellations and additions with regard to the claims, the Examiner is requested to consider currently pending Claims 22 to 46. Claims 1-21 have been canceled for the reason noted above. Claims 22, 28, 29, 32 and 34 have been amended. Claims 22 and 32 have been amended by adding the limitation of the original Claim 34, which has also been amended. Claims 28 and 29 have been amended to overcome the rejection under 35 USC 112, as noted below. New Claims 35-46 are requested to be entered with this amendment. No new matter has been added by these amendments or new claims. Support for the new claims may be found at least on pages 4, 6, 11, 13 and 17 of the present application.

In addition, Applicants respectfully request that the Examiner enter the amendment of the paragraph on page 1, spanning lines 18-24. This amendment better

articulates the background of the invention and focuses the discussion of the prior art references cited in the background section. As this amendment is of a formal nature, it may properly be entered by the Examiner.

Rejection Under 35 USC § 112

Claims 28 and 29 were rejected under 35 USC 112, second paragraph as being indefinite. The Examiner noted that the terms "the outside" and "the inside" lacked antecedent basis. Claims 28 and 29 were amended to provide proper antecedent bases for these terms. The amendment does not narrow the claims. As the rejection has been overcome, Applicants request this rejection be withdrawn.

Rejections Under 35 USC § 102

1. Claim 22

Claim 22 was rejected as being anticipated by Adams et al (US 5,692,526). Applicants believe that the Office Action includes a typo in that the Examiner intended to refer, not to Figure 1, but to Figure 7 of Adams in support of the rejection. This rejection is traversed for the following reason.

Claim 22 requires that the adhesive applicator be arranged between the bobbin and the garniture for applying "cross-directional" bands of adhesive. As noted in the present application at page 6, lines 5-9:

the term "cross-directional" means in a direction transverse to the longitudinal axis of the paper strip, though not necessarily perpendicular to the longitudinal axis of the paper strip. The term "cross-directional" excludes the longitudinally-oriented cigarette seam adhesive of a conventional cigarette and any essentially longitudinally-oriented adhesive application to a cigarette.

Adams fails to disclose arranging the applicator for applying cross-directional bands of adhesive. Rather, as noted in Adams at col. 14, lines 36-46, the adhesive applicator is arranged to apply adhesive only in a longitudinal band along the seam of the paper. Therefore, Applicants submit this claim is not anticipated by Adams, and request that the rejection be withdrawn.

In addition, Claim 22 has been amended to require that the adhesive applicator be adapted to apply sufficient amounts of adhesive to reduce the porosity of the paper to within a certain range. This limitation is not disclosed by Adams. For this additional reason, this rejection should be withdrawn.

2. Claims 22-23 and 31-33

Claims 22-23 and 31-33 were rejected as being anticipated by Hall (US 4,174,720). This rejection is traversed for the following reason.

Claim 22 is directed to a cigarette maker that requires that the adhesive applicator be arranged between the bobbin and the garniture for applying the adhesive to the portion of the paper wrapped about the smokable rod. In contrast, Hall is directed to apparatus for making cigarette filters that is arranged to apply adhesive to

the filter paper wrapped about the filter – not the smokable rod. (See Fig. 3)

Accordingly, Hall does not disclose the arrangement as required by claim 22.

Therefore, Applicants submit this claim is not anticipated by Hall, and request that the rejection be withdrawn.

In addition, Claim 22 has been amended to require that the adhesive applicator be adapted to apply sufficient amounts of adhesive to reduce the porosity of the paper to within a certain range. This limitation was in original Claim 34. This limitation is not disclosed by Hall. For this additional reason, this rejection should be withdrawn.

Claims 23 and 31 depend from Claim 22 and are therefore patentable over Hall for the same reasons as Claim 22.

Claim 32 is directed to a method for making a cigarette smoking article that includes a bobbin for paying out a paper wrapper to a garniture for wrapping about a smokeable rod. The claim requires that the adhesive be applied to the paper wrapper that is wrapped about the smokeable rod. In contrast, Hall discloses a method for making cigarette filters where adhesive is applied to the filter paper wrapped about the filter – not the smokable rod. (See Fig. 3) Accordingly, Hall does not disclose the method as required by claim 32. Therefore, Applicants submit this claim is not anticipated by Hall, and request that the rejection be withdrawn.

In addition, Claim 32 has been amended to require that the adhesive applicator be adapted to apply sufficient amounts of adhesive to reduce the porosity of the paper

to within a certain range. This limitation was in original Claim 34. This limitation is not disclosed by Hall. For this additional reason, this rejection should be withdrawn.

Claims 33 depends from Claim 32 and is therefore patentable over Hall for the same reasons as Claim 32.

#### Rejections Under 35 USC § 103

1. Claims 24-29 and 34

Claims 24-29 and 34 were rejected as being obvious over Hall (US 4,174,720) as applied to claims 22 and 23 and in further view of Ogura et al (US 5,364,477). Applicants traverse this rejection for the following reasons.

Claims 24-29 depend from Claim 22 and are therefore patentable over Hall for the reasons stated above with regard to Claim 22. Ogura fails to disclose any additional features that in combination with Hall render Claim 22 obvious. The Examiner cited Ogura merely for the disclosure of the heaters, which are used to dry paste applied to tipping paper.

In addition, Claims 24-29 and 34 are also patentable, because Claims 22 and 32 have been amended to incorporate the limitation from original Claim 34. Applicants submit that Claims 22 and 32 are not obvious over the combination of Hall and Ogura as the Examiner asserted against original Claim 34. In the Office Action for original Claim 34, the Examiner asserted that "absent any indication by Hall, it is assumed that plug paper wrappers have the conventional porosities such as those claimed by the

applicant." However, the porosity for conventional plug paper wrappers is irrelevant because the claims are directed apparatus and methods for reducing the porosity of the smokable cigarette paper in only limited regions wrapped about the smokable rod of tobacco. There is no suggestion in Hall or Ogura to wrap pasted plug paper or tipping paper around tobacco rods, or to apply adhesive to conventional cigarette paper wrapped about the tobacco rods, or to apply the claimed amounts of adhesive to reduce the porosity to within the claimed range so as to create a cigarette that has the low porosity as claimed only in the region where the adhesive is applied. Hall and Ogura disclose the equipment and process for wrapping filters and tipping paper, not tobacco rods, which use different equipment and different processes.

Claim 22 requires that the resultant paper wrapper have a porosity that is "reduced" in the region where the adhesive is applied to fall into the claimed range. Thus, the apparatus of Claim 22 is arranged to apply a sufficient amount of adhesive in the cross-directional bands to reduce the porosity from a conventional level for a paper wrapper used to wrap the smokable rod of tobacco down to the claimed porosity range. Hall and Ogura both fail to disclose apparatus arranged for doing this since each are concerned only with applying sufficient adhesive to secure the plug paper to the filter or the tipping paper to join the filter and wrapped smokable rod, but not addressing applying adhesive to the paper wrapper for the tobacco rod. Hall and Ogura provide no suggestion to modify its teachings to ensure the equipment and process are arranged

to apply sufficient adhesive to achieve the claimed porosities where the adhesive is applied.

Moreover, it would not be obvious to modify the apparatus disclosed in Hall and Ogura for use in the Applicant's invention because of the differences between the equipment and manufacturing processes for wrapping filter paper, tipping paper and smokable wrapping paper for the tobacco rods. One skilled in the art would consider that application of cross-directional bands of adhesive to tobacco wrapping paper may weaken the paper and cause it to tear as it is pulled through the machine and wrapped about the tobacco rod. As noted in the application at page 18, lines 14-16, the pre-heater and post-heater are used to sufficiently dry the adhesive to prevent the paper from tearing as it is wrapped around the tobacco. Neither Hall nor Ogura deal with this problem nor provide any motivation to one skilled in the art to arrange the apparatus disclosed therein to be used for drying adhesive applied to wrapping paper for the tobacco rods.

Indeed, because of the lack of any motivation to modify Hall or Ogura, the natural combination of the two references, following the Examiner's logic, would lead one of ordinary skill in the art to an apparatus arranged for wrapping filters and incorporating the heaters of Ogura, which is not the Applicant's invention recited in Claim 22 or 32. For these reasons, Claims 22 and 32 are not obvious over Hall in view of Ogura. Therefore, the rejections against Claims 24-29 and 34, which depend from Claims 22 and 32, should be withdrawn.

2. Claim 30

Claim 30 was rejected as being obvious over Hall as applied to claims 22 and 23 and further in view of admitted prior art (Admission). Applicants traverse this rejection because the Examiner has incorrectly presumed an admission that was not made by Applicants.

Applicants submit that the Examiner erroneously relied upon the present application for support of an admission that an "applicator roll having transverse grooves spaced circumferentially around the periphery of the roller is well known in the art. (Page 17 lines 19-23)." The Examiner has taken the Applicants' statement out of context and ignored the controlling phrase "in a manner well known in the art." The actual sentence reads:

Roller 56 is an application roller and roller 58 is a pattern roller, preferably a gravure or intaglio pattern roller provided with a plurality of circumferentially spaced transverse grooves in a manner well known in the printing art.  
(underlines added)

In other words, the Applicants are complying with the requirements under 35 USC § 112 by describing how to practice the invention by disclosing that the inventive pattern of circumferential grooves are to be applied to the pattern roller according to manners known in the art of intaglio or gravure printing. This is not an admission that the specific pattern is known in the art as asserted by the Examiner, but merely that



manners or methods for applying patterns to gravure or intaglio pattern rollers are well known in the art and may be used to apply the disclosed pattern to the pattern roller.

Applicants submit that in a proper reading of the application, the Applicants have not made the admission asserted by the Examiner. Therefore, Applicants request that the rejection of Claim 30 be withdrawn for at least this reason, or for the reason that it depends from Claim 22, which as noted above is patentable.

3. Claims 22-23, 28-29 and 31-34

Claims 22-23, 28-29 and 31-34 were rejected as being anticipated by or obvious over Collins et al (US 5,450,863). This rejection is traversed for the following reasons.

Claim 22 requires the adhesive applicators be adapted for applying sufficient amounts of adhesive to reduce the porosity of the wrapping paper to less than 20 Coresta units. Claim 32 requires the method of applying sufficient adhesive to reduce the porosity of the paper to less than 20 Coresta units. Collins fails to teach these limitations, and even teaches away from this limitation. Collins teaches that the amount of adhesive applied should be minimized, and that only enough should be used to allow sufficient amounts of particulate matter to adhere to achieve the desired low burn rate. (col. 4, lines 58-63). Accordingly, Collins is not concerned with reducing the porosity of the cigarette paper down within the claimed range, but only with adhering sufficient amounts of particulate material. Because Collins teaches the amount of adhesive

should be minimized, one skilled in the art would likely not be motivated to add additional adhesive to obtain the claimed porosity.

Indeed, Collins teaches using preferably only enough for a thickness of 0.0002 to 0.003 inches. For a band having a dimension of 5 mm by 20 mm (See Applicant's Examples) with that range of thickness for a typical cigarette seam adhesive, only about 0.6-0.9 mg of adhesive need be applied. In contrast, Applicants teach that preferably 1 mg to 1.5 mg is used to obtain the claimed porosity levels in the regions where the adhesive is applied. Collins teaches that the amount of particulate material adhered to the adhesive is controlling the burn rate characteristics, but provides no motivation that this burn rate or reduced porosity could be achieved with use of sufficient quantities of adhesive alone. Therefore, Collins does not teach or suggest the invention as claimed in Claim 22 or 32. Accordingly, Claims 22 and 32 and Claims 23, 28-29, 31, and 33-34 depending therefrom are patentable over Collins.

#### 4. Claims 24-27

Claims 24-27 were rejected as being obvious over Collins et al. as applied to claims 22 and 23 and in further view of Ogura et al (US 5,364,477). Applicants traverse this rejection for the following reasons.

Claims 24-27 depend from Claim 22 and are therefore patentable over Collins for the reasons stated above with regard to Claim 22. Ogura fails to disclose any additional features that in combination with Collins render Claim 22 obvious. The

Examiner cited Ogura merely for the disclosure of the heaters, which are used to dry paste applied to tipping paper.

In addition, Claims 24-27 are also patentable, because Claim 22 has been amended to incorporate the limitation from original Claim 34. Applicants submit that Claim 22 is not obvious over the combination of Collins and Ogura as the Examiner asserted against original Claim 34. In the Office Action for original Claim 34, the Examiner asserted that "absent any indication by Collins, it is assumed that cigarette paper wrappers have the conventional porosities such as those claimed by the applicant." However, the porosity for conventional cigarette paper wrappers is irrelevant because the claims are directed apparatus and methods for reducing the porosity of the smokable paper in only limited regions wrapped about the smokable rod of tobacco. There is no suggestion in Collins or Ogura to apply sufficient amounts of adhesive to reduce the porosity to within the claimed range.

Moreover, Claim 22 requires that the paper wrapper have a porosity that is "reduced" in the region where the adhesive is applied to fall into the claimed range. Thus, the apparatus of Claim 22 is arranged to apply a sufficient amount of adhesive in the cross-directional bands to reduce the porosity from a conventional level for a paper wrapper used to wrap the smokable rod of tobacco down to the claimed porosity range. Collins and Ogura in combination both fail to disclose apparatus arranged for doing this because each are concerned only with applying sufficient adhesive to either adhere particulate matter to the adhesive or secure the tipping paper to join the filter and

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Amendment

wrapped smokable rod, but not addressing applying adhesive to reduce the porosity to within the claimed range.

For these reasons, Claim 22 is not obvious over Collins in view of Ogura. Therefore, the rejections against Claims 24-27, which depend from Claim 22, should be withdrawn.

New Claims 35-46

New Claims 35-46 are patentable over the cited references for at least the reasons noted above for the independent claims 22 and 32 from which they depend.

In addition, these claims recite additional limitations not disclosed in the cited references, such as preferred reduced porosity ranges, location of the adhesive relative to the tobacco rod, amounts of adhesive to be applied in each band, physical properties for preferred adhesive formulation, specific details about the patterned grooves in the pattern roller, and temperature limits for preheating the paper. Therefore, these claims are patentable over the cited references.

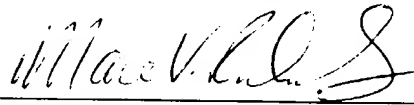
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**Conclusion**

In view of the foregoing amendment and remarks, Applicants respectfully assert that the rejection is rendered moot or overcome and the claims are in condition for allowance. Should there be any matters of a formal nature to be clarified, please call the undersigned attorney in order to expedite allowance of this application.

Respectfully submitted,

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